APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,782	01/16/2004	Richard L. Marks	SONYP030	8149

25920　　　　7590　　　　02/27/2008		EXAMINER
MARTINE PENILLA & GENCARELLA, LLP		DHARIA, PRABODH M
710 LAKEWAY DRIVE		

	ART UNIT	PAPER NUMBER
SUITE 200	2629	
SUNNYVALE, CA 94085		

MAIL DATE	DELIVERY MODE
02/27/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/759,782	MARKS, RICHARD L.
	Examiner	Art Unit
	Prabodh M. Dharia	2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 January 2008*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18 and 34-50* is/are pending in the application.

   4a) Of the above claim(s) *19-33* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18 and 34-50* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 January 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

1.   **Status:** Please all the replies and correspondence should be addressed to examiner's

new art unit 2629. The application number 10759782 has been withdrawn from issue due to

unpatentability of claims. Claims 1-18 and 34-50 are pending in this action.

2.   The USPTO OPQA has determined the prior art of Girod; Bernd (US 6677987 B1)

anticipates claims of application number 10759782. Therefore application number 10759782 has

been withdrawn from issue and prosecution of application number 10759782 is reopened.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed
> in the United States before the invention by the applicant for patent or (2) a patent granted on an application for
> patent by another filed in the United States before the invention by the applicant for patent, except that an
> international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this
> subsection of an application filed in the United States only if the international application designated the United
> States and was published under Article 21(2) of such treaty in the English language.

4.   Claims 1-5 and 34 are rejected under 35 U.S.C. 102(e) as being anticipated by Girod (US

6,677,987 B1).

Regarding Claim 1, Girod (US patent 6,677,987) a method for triggering input

commands of a program run on a computing system (Col. 1, Lines 43-45), comprising:

monitoring a field of view in front of an image capture device that is placed in a direction of a

display screen (Col. 4, Lines 33-35); identifying a light source within the field of view (Col. 4,

Lines 36,37), the light source being pointed in the direction of the image capture device (Fig, 1, reference 108, fig. 2, reference 204, Col. 4, Lines 31-37); tracking the light source as it is pointed toward the display screen (fig, 1, reference 102,108, Col. 4, lines 36-40), the display screen illustrating objects that can be interacted with; detecting a change in light emitted from the light source (Col. 7, Lines 15-18); and in response to detecting the change, triggering an input command at the program run on the computing system, the input command acting to interface with one or more objects illustrated on the display screen (Col. 3, Lines 48-57).

Regarding Claim 2, Girod (US patent 6,677,987) the change in light is one of a color change, and a light variation change (Col. 4, Lines 2-15).

Regarding Claim 3, Girod (US patent 6,677,987) the light source is a light emitting diode (LED) capable of emitting multiple colors of light (Col. 4, Lines 2-15).

Regarding Claim 4, Girod (US patent 6,677,987) the method operation of identifying a light source within the field of view includes, masking background light effects within the field of view (Col. 5, Lines 9-12, Col. 4, Lines 12-15).

Regarding Claim 5, Girod (US patent 6,677,987) the method operation of masking background light effects within the field of view includes, reducing an amount of light allowed into an aperture of the image capture device (Col. 4, Lines 12-15, by varying light modulation, Col. 5, Lines 9-12, Col. 7, Lines 8-22).

Regarding Claim 34 , Girod (US patent 6,677,987) a computing system, comprising: an

image capture device being positioned in a direction of a display screen (Col. 3, Lines 21-60);

logic for monitoring a field of view associated with the image capture device; logic for tracking a

position of a light source associated with an input object, the light source being pointed toward

the display screen (Col. 3, Lines 21-60, Col. 4, Lines 31-40, Col. 5, Line 66 to Col. 6 Line 15);

logic for detecting a color change in the light source; and logic for triggering a mode change

command at a main program run through the computing system (Col. 5, Line 66 to Col. 6, Line

58, please see abstract, Col. 3, Lines 21-60, Col. 4, Lines 31-40, Col. 1, Line 44-50 and Claim

11and 12), in response to the detected color change in the light source, the mode change

triggering an action for interfacing with one or more objects illustrated on the display screen, the

color change being from a first color to a second color, and discontinuing the mode change

command when the color change in the light reverts to an initial color or another color (Col. 3,

Lines 21-60, Col. 4, Lines 31-40, Col. 5, Line 66 to Col. 6 Line 15).

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains.˙ Patentability shall not be negatived by the
> manner in which the invention was made.

6.   Claims 6,11,17,39 and 41-47 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Girod (US 6,677,987 B1) as applied to claims 1-5 and 34 above and further in view of

Curran et al. (US 6,753,849 B1).

        Regarding Claim 6, Girod (US 6,677,987 B1) fails to disclose the input command causes

a mode change linked to a cursor displayed on the display screen associated with the computing

system.

        However, Curran et al. discloses the input command causes a mode change linked to a

cursor displayed on a display screen associated with the computing system (Col. 3, Line 12 to

Col. 4, Line 19 during the mouse mode different position of the cursor selected by the light

variation, and similarly in television mode similar light variation determines channels and

program for television using microprocessor (Col. 8, Lines 7-40, Col. 9, Line 30 to Col. 10, Line

67).

        The reason to combine Girod (US 6,677,987 B1) fails to disclose a specific method of

activating a specific operation by triggering by detecting light variation in a light emitting input

device. However, Curran does disclose a remote for a TV where user not only watches TV

programming but also has computer mouse operation available to operate and select randomly

any specific programming selected from menu presented on the screen by dragging, dropping or

moving cursor any where on the screen.

        Thus it would have been obvious to one in the ordinary skill in the art at the time of

invention was made to incorporate the teaching of Curran et al. in the teaching of Pryor to be

able to have user friendly TV system not only user can watch different programming but also .

play video game.

Regarding Claim 11, Girod (US patent 6,677,987) disclose a method for detecting input

commands from an input source (Col. 1, Lines 43-45) within a field of sight of an image capture

device positioned at a display screen (Col. 4, Lines 43-45), comprising: minimizing an amount of

light entering the image capture device (fig, 1, reference 102,108, Col. 4, lines 31-40); detecting

a first color light from the input source through the image capture device (Col. 4, Lines 12-15, by

varying light modulation, Col. 5, Lines 9-12, Col. 7, Lines 8-22) the first color light being

directed toward the display screen and the image capture device (Col. 3, Line 58 to Col. 4,

Line15), such that directing the first color toward the display screen enables interactive

movement of a cursor on the display screen; detecting a change from the first color light to a

second color light (Col. 3, Line 58 to Col. 4, Line15, Col. 4, Lines 12-15, by varying light

modulation, Col. 5, Lines 9-12, Col. 7, Lines 8-22); and presenting a mode change in response to

changing to the second color light, the mode change operating to cause an action On one or more

objects being illustrated on the display screen the change in the first color light signal (Col. 4,

Lines 12-15, by varying light modulation, Col. 5, Lines 9-12, Col. 7, Lines 8-22, Col. 3, Line 20

to Col. 4, Line15).

However, Girod (US patent 6,677,987) disclose the input command causes a mode

change linked to a cursor displayed on the display screen associated with the computing system.

However, Curran et al. discloses the input command causes a mode change linked to a cursor

displayed on a display screen associated with the computing system (Col. 3, Line 12 to Col. 4,

Line 19 during the mouse mode different position of the cursor selected by the light variation, and similarly in television mode similar light variation determines channels and program for television using microprocessor (Col. 8, Lines 7-40, Col. 9, Line 30 to Col. 10, Line 67).

The reason to combine Girod (US 6,677,987 B1) fails to disclose a specific method of activating a specific operation by triggering by detecting light variation in a light emitting input device. However, Curran does disclose a remote for a TV where user not only watches TV programming but also has computer mouse operation available to operate and select randomly any specific programming selected from menu presented on the screen by dragging, dropping or moving cursor any where on the screen.

Thus it would have been obvious to one in the ordinary skill in the art at the time of invention was made to incorporate the teaching of Curran et al. in the teaching of Pryor to be able to have user friendly TV system not only user can watch different programming but also play video game.

Regarding Claim 17, Curran et al. teaches the mode change is associated with one of a click and drag operation and a highlighting operation (Col. 8, Lines 7-24).

Regarding Claim 39, Curran et al. the logic for correlating the movement of the light source to movement of a cursor on the display screen includes, logic for adjusting a scale associated with translation of the movement of the light source to the movement of the cursor according to a distance of a user relative to the image capture device (Col. 3, Line 30 to Col. 4, Line 19, Col. 5, Lines 9-23).

Regarding Claim 41, Girod (US patent 6,677,987) discloses an system including input device for interfacing with a computing device (please see abstract, Col. 1, Lines 43-50), the system comprising: (a) the input device including, (i) a body (please see figure 1, item # 118); (ii) a light emitting diode (LED) affixed to the body of the input device (Col. 3, Line 58 to Col. 4, Line 56, discloses infrared light source are well known to one ordinary skill in the art being a LED or laser LED); (iii) a power supply for the LED (it is well known to one ordinary skill in the art for remote or pointing device to have battery as their power supply); (iv) a mode change activator integrated into the body of the input device, the mode change activator configured to cause a variation of a light originating from the LED, wherein the variation is capable of being detected to cause a mode change at the computing device (Col. 3, Line 58 to Col. 4, Line15, Col. 4, Lines 12-15, by varying light modulation, Col. 5, Lines 9-12, Col. 7, Lines 8-22); (b) a display screen configured to illustrate objects (Col. 3, Lines 21-64); (c) an image capture device placed at a location of the display screen, the image capture device being configured to capture the LED of the input device when directed toward the display screen to enable interaction with illustrated objects as a result of the mode change, the mode change being a result of the LED of the input device changing from one color to another color, and the mode change being discontinued when the changing in light reverts back to an original color or another color, as triggered by the mode change activator of the input device (Col. 3, Line 21 to Col. 4, Line15, Col. 4, Lines 12-15, by varying light modulation, Col. 5, Lines 9-12, Col. 7, Lines 8-22, Col. 5, Line 66 to Col. 6, Line 58, please see abstract, Col. 3, Lines 21-60, Col. 4, Lines 31-40, Col. 1, Line 44-50 and Claim 11and 12).

However, Girod fails to specifically disclose a light emitting diode (LED) affixed to the body of the input device and a power supply for the LED.

However, Curran et al. teaches an input device for interfacing with a computing (Col. 2, Lines 57-59, Col. 6, Lines 8-11) device, comprising: a body; a light emitting diode (LED) affixed to the body (Col. 3, Lines 6-11); a power supply for the LED (Col. 8, Lines 41-46); a mode change activator integrated into the body (Col. 3, Lines 30-41), the mode change activator configured to cause a variation of a light originating from the LED, wherein the variation is capable of being detected to cause a mode change at the computing device (Col. 3, Line 12 to Col. 4, Line 19 during the mouse mode different position of the cursor selected by the light variation, and similarly in television mode similar light variation determines channels and program for television using microprocessor, Col. 8, Lines 7-40, Col. 9, Line 30 to Col. 10, Line 67).

The reason to combine Girod fails to disclose a specific method of activating a specific operation by triggering by detecting light variation in a light emitting input device. However, Curran does disclose a remote for a TV where user not only watches TV programming but also has computer mouse operation available to operate and select randomly any specific programming selected from menu presented on the screen by dragging, dropping or moving cursor any where on the screen.

Thus it would have been obvious to one in the ordinary skill in the art at the time of invention was made to incorporate the teaching of Curran et al. in the teaching of Girod to be able to have user friendly TV system not only user can watch different programming but also play video game.

Regarding Claim 42, Curran et al. teaches the mode change activator is configured to cycle between two variations of the light ((Col. 3, Line 12 to Col. 4, Line 19 during the mouse mode different position of the cursor selected by the light variation, and similarly in television mode similar light variation determines channels and program for television using microprocessor, Col. 8, Lines 7-40, Col. 9, Line 30 to Col. 10, Line 67).

Regarding Claim 43, Curran et al. teaches the body includes a first end and a second end, a first LED affixed to the first end, a second LED affixed to the second end. (Col. 2, Lines 57-59, Col. 6, Lines 8-11, Col. 8, Lines 41-46, Col. 3, Lines 6-41).

Regarding Claim 44, Curran et al. teaches the first LED emits a first variant of light and the second LED emits a second variant of light (Col. 3, Line 12 to Col. 4, Line 19).

Regarding Claim 45, Curran et al. teaches an infrared emitter (Col. 3, Line 14).

Regarding Claim 46, Curran et al. teaches the body includes a first LED adjacently located to a second LED, the first LED emitting a first variant of light and the second LED emitting a second variant of light ring and thimble (Col. 3, Line 12 to Col. 4, Line 19).

Regarding Claim 47, Curran et al. teaches the body is configured to be held within a human hand (Col. 3, Line 30).

7.   Claims 7-10,12-16,18, 35-38, 40 and 48-50 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Girod (US 6,677,987 B1) in view of Curran et al. (US 6,753,849 B1) as

applied to claims 1-6, 11, 17, 34, 39 and 41-47 above and further in view of Pryor (US 2006/

0033713 A1).

Regarding Claim 7, Curran et al. discloses operation of identifying a light source within

the field of view includes, defining an area representing the light source within a grid associated

with the image capture device; and expanding the area representing the light source within the

grid (Col. 3, Line 42 to Col. 4, Line 19, discloses how vertical and horizontal masking is

organized to create grid type environment).

However, Girod and Curran et al. fails to disclose operation of identifying a light source

within the field of view includes, defining an area representing the light source within a grid

associated with the image capture device; and expanding the area representing the light source

within the grid.

However, Pryor discloses operation of identifying a light source within the field of view

includes, defining an area representing the light source within a grid associated with the image

capture device; and expanding the area representing the light source within the grid (page 37,

paragraph 657, pages 21,22, paragraphs 390,397).

The reason to combine LED or IR devices need specific path for light to travel to achieve

accuracy and avoid all the neighbor devices or environmental interference. The ring with LED

let user point more accurately than a regular remote controller.

Thus it would have been obvious to one in the ordinary skill in the art at the time of

invention was made to incorporate the teaching of Pryor in the teaching of Girod modified by

Curran et al. to be able to have user friendly remote like a ring that fits on the finger to be able to

pint and have a path for light to travel to achieve accuracy and avoid all the neighbor devices or

environmental interference.

Regarding Claim 8, Pryor discloses operation of expanding the area representing the light

source within the grid includes, defocusing the image capture device relative to the light source

(page 37, paragraph 657, pages 21,22, paragraphs 390,397, page 38, paragraph 676).

Regarding Claim 9, Pryor discloses operation of identifying a light source within the field

of view includes, calculating a centroid of an image representing the light source through a grid

associated with the image capture device (page 37, paragraph 657, pages 21,22, paragraphs

390,397, page 20, paragraph 373, page 8, paragraph 177, page 23, paragraph 414).

Regarding Claim 10, Pryor discloses translating coordinates of the centroid to a location

on a display screen associated with the computing system; detecting movement of the light

source within the field of view; and correlating the movement of the light source to movement of

a cursor on the display screen (page 37, paragraph 657, pages 21, 22, paragraphs 390,397, page

20, paragraph 373, page 8, paragraph 177, page 23, paragraph 414 page 13, paragraph 242, page

19, paragraph 365).

Regarding Claim 12, Pryor discloses minimizing an amount of light entering an image

capture device includes, reducing an aperture size (or filtering the light) of the image capture

device to enhance a signal representing light from the input source relative to other captured

image data (page 8, paragraphs 177,178 page 40, paragraphs 693-705, page 34, paragraph 599,

by filtering the light).

Regarding Claim 13, Pryor does disclose operation of reducing an aperture size of the

image capture device results in filtering background light capable of interfering with light

received from the input device (page 40, paragraphs 693-705, page 34, paragraph 599).

Regarding Claim 14, Pryor teaches operation of detecting a first color light signal from

the light source through the image capture device includes, determining a location of a center of

the first color light signal on a coordinate system associated with the image capture device; and

mapping the location to a corresponding location on a display screen (page 37, paragraph 657,

pages 21,22, paragraphs 390,397, page 20, paragraph 373, page 8, paragraph 177, page 23,

paragraph 414 page 13, paragraph 242, page 19, paragraph 365).

Regarding Claim 15, Pryor teaches operation of detecting a change from the first color

light to a second color light includes, detecting the second color light from the input source; and

comparing pixel values associated with the first color light to pixel values associated with the

second color light (pages 8,9, paragraphs 176-186).

Regarding Claim 16, Pryor teaches reverting to the first color light from the second color

light; and in response to reverting to the first color light, terminating the mode change (page 20,

paragraph 372, page 7, paragraphs 148-151, 153).

Regarding Claim 18, Pryor teaches the first color light and the second color light

originate from one of a single light emitting diode and multiple light emitting diodes (page 40,

paragraph 705, page 4, paragraph 95).

Regarding Claim 35, Pryor teaches the computing system is one of a game console, a

general computer, networked computer, and a distributed processing computer (page 4,

paragraphs 102, page 5, paragraphs 105,108, page 14, paragraphs 267-272).

Regarding Claim 36, Pryor teaches the logic for detecting a color change in the light

source includes, logic for detecting a change in a pixel value associated with the light source; and

logic for detecting a change in a position of the light source relative to the image capture device

(pages 8,9, paragraphs 176-186).

Regarding Claim 37, Pryor teaches each logic element is one or a combination of

hardware and software (pages 14,15, paragraph 272, page 28, paragraph 491, page 29, paragraph

510, it is well known to one ordinary skill in the art, as in order to develop game system or

networking the hardware and software both will have plenty of logic to achieve objective).

Regarding Claim 38 Pryor teaches the logic for detecting a change in a position of the light source relative to the image capture device includes, logic for calculating a centroid of an image representing the light source through a grid associated with the image capture device. logic for translating coordinates of the centroid to a location on a display screen associated with the computing system; logic for detecting movement of the light source within the field of view; and logic for correlating the movement of the light source to movement of a cursor on the display screen (page 8, paragraphs 177,178 page 40, paragraphs 693-705, page 34, paragraph 599, page 37, paragraph 657, pages 21,22, paragraphs 390,397, page 20, paragraph 373, page 23, paragraph 414 page 13, paragraph 242, page 19, paragraph 365).

Regarding Claim 40 Pryor teaches logic for minimizing an amount of light entering the image capture device in order to mask background light not associated with the light source (page 8, paragraphs 177,178 page 40, paragraphs 693-705, page 34, paragraph 599).

Regarding Claim 48, Pryor the body is a ring configured to fit over a human finger page 39, paragraphs 684-687).

Regarding Claim 49, Pryor teaches the body is thimble shaped and the LED is affixed to a base of the thimble shaped body (page 39, paragraph 692).

Regarding Claim 50, Curran et al. teaches the mode change activator is configured to cycle between at least three light variant changes (Col. 3, Line 12 to Col. 4, line 19).

Pryor teaches the mode change activator is configured to cycle between at least three

light variant changes (page 20, paragraph 372, page 7, paragraphs 148-151,153, page 7,

paragraphs 146-152, page 8, paragraph 180, page 34, paragraph 599, page 36,37 paragraphs 635-

654).

Conclusion

8.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

        Simpson et al. ((WO 98/48571) Control of video level be region and content of

information displayed.

9.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Prabodh M. Dharia whose telephone number is 571-272-7668.

The examiner can normally be reached on M-F 8AM to 5PM.

10.   The fax phone number for the organization where this application or proceeding is

assigned is 571-273-8300.

11.   Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR
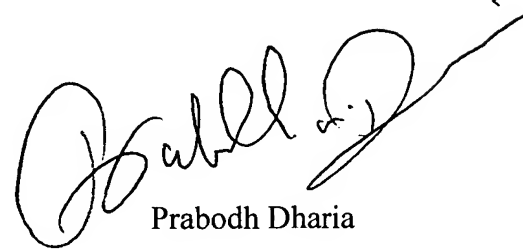
system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Prabodh Dharia

Primary Examiner

AU 2629

February 22, 2008